Claremont 27691

Route 12A over the Sugar River







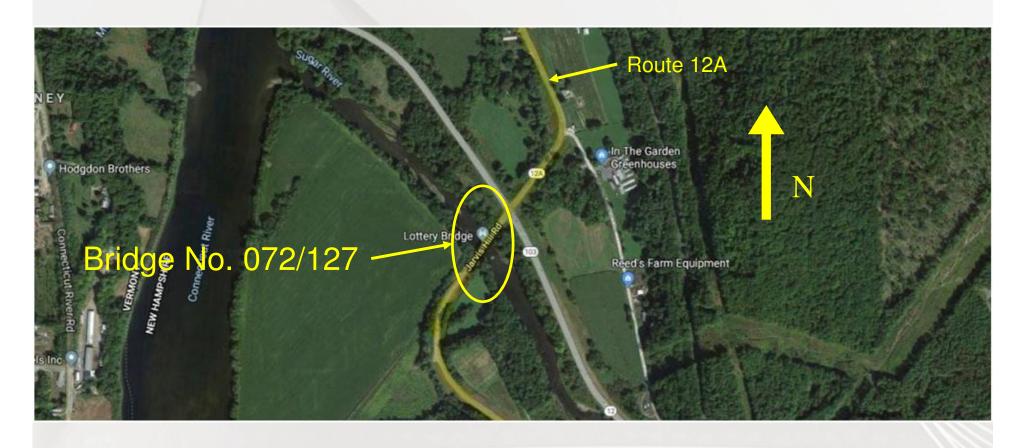
Introductions

- David Scott, PE
 - NHDOT Bureau of Bridge Design
 - Design Chief
- Jason Tremblay, PE
 - NHDOT Bureau of Bridge Design
 - Senior Project Engineer
- Anthony Weatherbee, PE, SE
 - NHDOT Bureau of Bridge Design
 - Project Engineer
- Nathan L Rosencranz, PE, SE
 - TranSystems Corp.
 - Project Consultant





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Bridge Rehabilitation – Route 12A over the Sugar River 130 feet south of intersection with Route 12





Project Purpose

- Bridge Rehabilitation
 - Extends the useful life of the bridge
 - Removes the bridge from the State Bridge
 Red List (currently no. 85)





Project Need



Spalled Deck w/ Exposed Rebar

Heavy Rust on Bottom Flange of Girder

Repair Patch Exhibiting Delamination







Project Need



Heavy Rust on Bottom Flange of Girder

Heavy Rust on Bearing







Project Need



Delamination and Spalling on North Abutment

Tree Debris at the Pier







Bridge Information

- Three span continuous
- 276 foot Welded Steel Plate Girder
- Built in 1967 and rehabilitated in 1991
- 32'-8" wide
- 30 foot rail to rail and 28 foot curb to curb
- Bridge is coded as Scour Critical





Project Scope

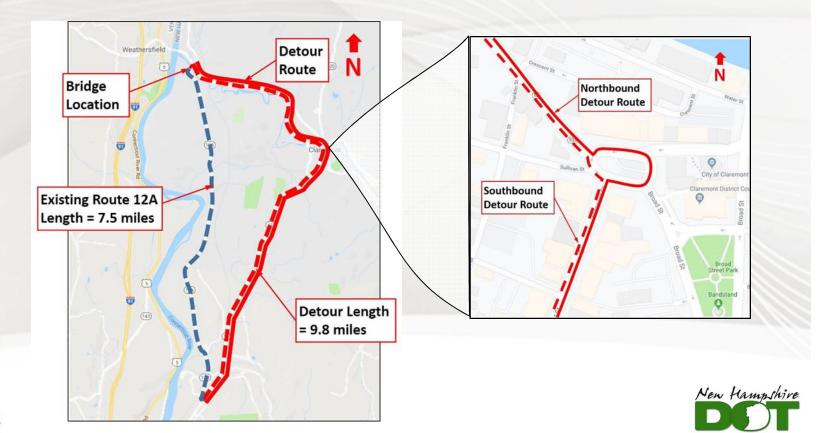
- Replace bridge deck
- Replace expansion joint
- Replace bearings
- Repaint superstructure
- Replace bridge and approach rail
- Install scour countermeasures





Traffic Control Alternative 1

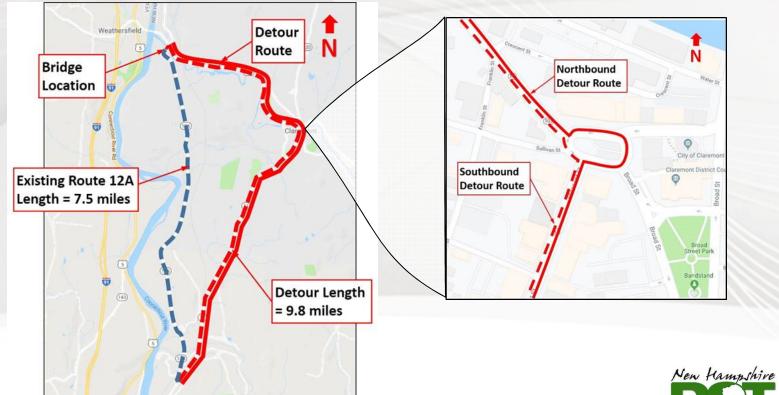
- Full bridge closure (Northbound and Southbound detour)
- Conventional construction techniques
- Total detour length 17.3 miles





Traffic Control Alternative 2

- Full bridge closure (Northbound and Southbound detour)
- Accelerated bridge construction techniques
- Total detour length 17.3 miles

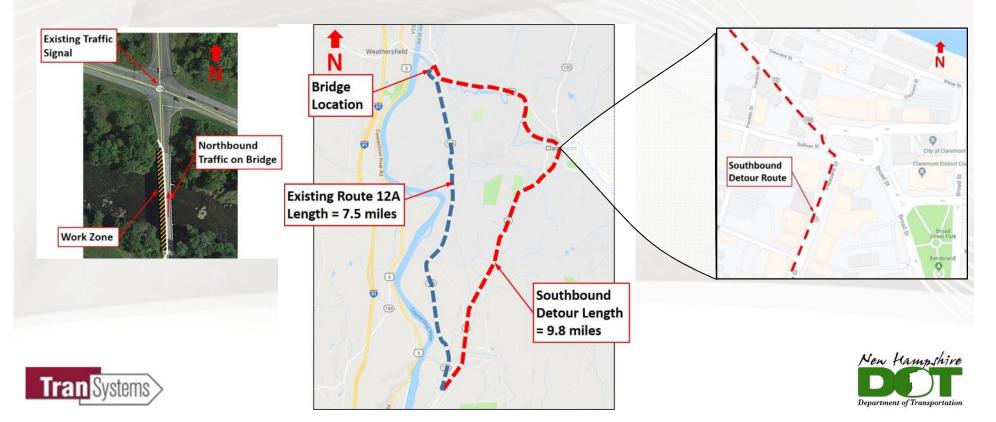




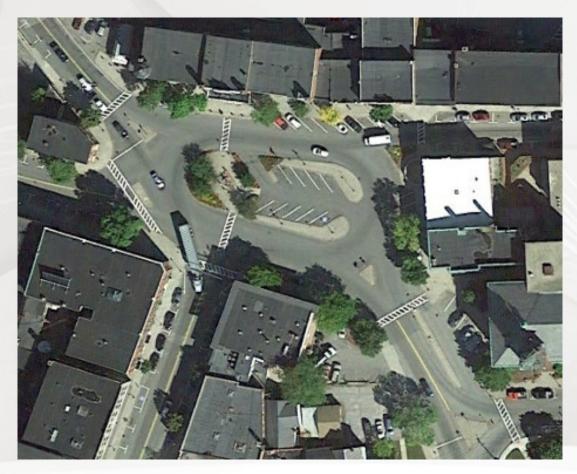


Traffic Control Alternative 3

- Partial bridge closure (Southbound detour)
- Phased construction
- Requires Southbound traffic to travel through downtown rotary
- Total detour length 17.3 miles



Traffic Control Alternative 3 – Truck Traffic



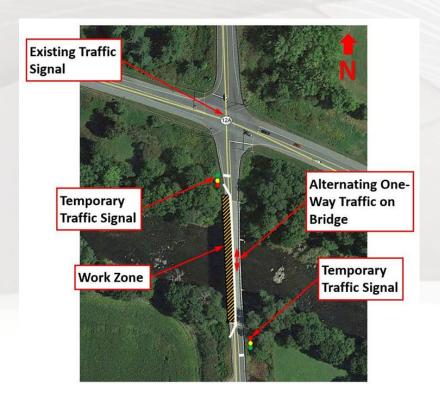
Truck going South through detour at rotary





Traffic Control Alternative 4

- Alternating one-way traffic
- Phased construction
- Temporary traffic signals
- Only 70' between Route 12 intersection and temporary signal







Ongoing Considerations

- Superstructure replacement
- Pavement treatment





Anticipated Project Schedules Short term-

- Claremont Traffic Control Advisory Committee
 October 30
- Claremont City Council
 November 13

Long term-

- Advertise for bids January 11, 2022
- Construction:
 - April to September 2022
 - 3 months per phase
- Completion October 2022





Discussion Topics

- Traffic Impacts (Phased or Full Closure & Detour)
- Pedestrian or Bike Usage
- Intersection/rotary Concerns
- Safety Concerns with Existing Situation
- Special Town Events
- Abutters
- Emergency Response Routes
- School Schedule and Bus Routes
- Preferred Construction Timing





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